

ATTACHMENT G – NOTICE OF INTENT

RECEIVED

WATER QUALITY ORDER NO. 2011-XXXX-DWQ  
GENERAL PERMIT NO. CAG XXXXXX

MAR 18 2011  
DIVISION OF WATER QUALITY

STATEWIDE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT  
FOR RESIDUAL PESTICIDE DISCHARGES TO WATERS OF THE UNITED STATES  
FROM VECTOR CONTROL APPLICATIONS

I. NOTICE OF INTENT STATUS (see Instructions)

Mark only one item ☒ A. New Applicator ☐ B. Change of Information: WDID# \_\_\_\_\_  
☐ C. Change of ownership or responsibility: WDID# \_\_\_\_\_

II. DISCHARGER INFORMATION

A. Name Owens Valley Mosquito Abatement Program			
B. Mailing Address 207 W. South St.			
C. City Bishop	D. County Inyo	E. State CA	F. Zip Code 93514
G. Contact Person Jerry Osur	H. Email address joser@inyocounty.us	I. Title Manager	J. Phone (760) 873-7853

III. BILLING ADDRESS (Enter Information only if different from Section II above)

A. Name			
B. Mailing Address			
C. City	D. County	E. State	F. Zip Code
G. Email address	H. Title	I. Phone	

#### IV. RECEIVING WATER INFORMATION

A. Pesticide residues discharge to (check all that apply)\*:

1. Canals, ditches, or other constructed conveyance facilities owned and controlled by Discharger.

☐ Name of the conveyance system: \_\_\_\_\_

2. Canals, ditches, or other constructed conveyance facilities owned and controlled by an entity other than the Discharger.

☒ Owner's name: Los Angeles Department of water and power  
Name of the conveyance system: Los Angeles Aqueduct, Owens Valley Irrigation Infrastructure.

3. Directly to river, lake, creek, stream, bay, ocean, etc.

☒ Name of water body: Owens River and tributaries, Owens Lake (See Attachment)

\* A map showing the affected areas for items 1 to 3 above may be included.

B. Regional Water Quality Control Board(s) where application areas are located

(REGION 1, 2, 3, 4, 5, 6, 7, 8, or 9): Region 6

(List all regions where pesticide application is proposed.)

#### V. PESTICIDE APPLICATION INFORMATION

A. Target Organisms: ☒ Vector Larvae ☒ Adult Vector

B. Pesticides Used: List Name and Active ingredients

See Attachment

C. Period of Application: Start Date March 1 End Date October 31

D. Types of Adjuvants Added by the Discharger: N/A Adulticides, see Attachment for larvicides

#### VI. PESTICIDES APPLICATION PLAN

A. Has a Pesticides Application Plan been prepared?\*

☒ Yes ☐ No

If not, when will it be prepared? \_\_\_\_\_

\* A copy of the PAP shall be included with the NOI.

B. Is the applicator familiar with its contents?

☒ Yes ☐ No

#### VII. NOTIFICATION

Have potentially affected governmental agencies been notified?

☐ Yes ☒ No This is a County Program.

\* If yes, a copy of the notifications shall be attached to the NOI.

TENTATIVE ORDER

GENERAL NPDES PERMIT FOR RESIDUAL PESTICIDE  
DISCHARGES FROM VECTOR CONTROL APPLICATIONS

ORDER NO. 2011-XXXX-DWQ  
NPDES NO. CAGXXXXXX

VIII. FEE

Have you included payment of the filing fee (for first-time enrollees only) with this submittal?

☒ Yes ☐ NO ☐ NA \$136<sup>00</sup>

IX. CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. Additionally, I certify that the provisions of the General Permit, including developing and implementing a monitoring program, will be complied with."

A. Printed Name: Terrold Oser

B. Signature: [Signature]

Date: 3/4/11

C. Title: Manager

X. FOR STATE WATER BOARD USE ONLY

WDID:	Date NOI Received:	Date NOI Processed:
Case Handler's Initial:	Fee Amount Received: \$	Check #:

TEMPORARY ORDER

## Attachment 2

### V.B. Pesticides Used for Vector Control

<u>Trade Name</u>	<u>Active Ingredient</u>
<b><u>Larvicides</u></b>	
GB 1111 (Golden Bear)	Aliphatic Petroleum Hydrocarbons
*** This product is used as a sticking agent, per label instructions, for the production of VectoBac TP sand granules. 200 lbs of sand are mixed with 56 ounces of GB 1111 oil and 8.6 lbs of Vectobac technical powder to yield 211.85 lbs of finished product. Label application rates vary from 5 to 20 lbs per acre of finished product which equals 1.3 to 5.3 ounces of GB 1111 per acre.***	
BVA Oil	Mineral oil
*** This product is used as a sticking agent, per label instructions, for the production of VectoBac TP sand granules. 200 lbs of sand are mixed with 56 ounces of BVA oil and 8.6 lbs of Vectobac technical powder to yield 211.85 lbs of finished product. Label application rates vary from 5 to 20 lbs per acre of finished product which equals 1.3 to 5.3 ounces of BVA Oil per acre.***	
Altosid SBG (granules)	(S)-Methoprene
Altosid 30 (briquettes)	(S)-Methoprene
Altosid XRG (granules)	(S)-Methoprene
Altosid XR (briquettes)	(S)-Methoprene
Vectobac TP (technical powder)	<i>Bacillus thuringiensis, subsp. Isrealensis</i>
Vectobac G (granules)	<i>Bacillus thuringiensis, subsp. Isrealensis</i>
VectoLex CG (granules)	<i>Bacillus spaericus</i> Serotype H5a5b, stain 2362
VectoMax CG (granules)	<i>Bacillus thuringiensis, subsp. Isrealensis</i> and <i>Bacillus spaericus</i> Serotype H5a5b, strain 2362
Fourstar briquettes	<i>Bacillus thuringiensis, subsp. Isrealensis</i> and <i>Bacillus spaericus</i> Serotype H5a5b, strain 2362
Agnique MMF (monomolecular film)	Poly (oxy-1,2-ethanediyl), $\alpha$ -isooctadecyl- $\omega$ -hydroxyl (100%)
<b><u>Adulticides</u></b>	
Zenivex E20	Etofenprox
Pyrenone 25-5 Public Health Insecticide	Pyrethrins, PBO
Evergreen Crop Protection EC 60-6	Pyrethrins, PBO

Owens Valley Mosquito Abatement Program  
Water Quality Order No. 2011-XXXX-DWQ, NOI

Attachment 1

IV. A.

1. Any and all navigable waters of the Owens Valley that breed mosquitoes including the Owens River and its tributaries, Klondike Lake, Tinnemaha Reservoir, Blackrock Waterfowl Area, Goose Lake, Billy Lake, and Owens Lake.
2. Flood irrigated pastureland.
3. Roadside low spots and backyard ponds and pools.



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**STATEWIDE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT DIVISION OF WATER QUALITY**  
**FOR RESIDUAL PESTICIDE DISCHARGES TO WATERS OF THE UNITED STATES**  
**FROM MOSQUITO CONTROL APPLICATIONS**

The NPDES Permit requires a Pesticides Application Plan (PAP) that contains the following elements:

- a. **Description of the target area and adjacent areas, if different from the water body of the target area;**

See attached map.

The Owens Valley Mosquito Abatement Program (the Program) operates in about 1200 square miles from the Inyo/Mono county line in the north to State Hwy 190 in the south; the base of the White Mountains in the east to the Eastern slope of the Sierra Nevada in the west.

- b. **Discussion of the factors influencing the decision to select pesticide applications for mosquito control;**

Please see the Best Management Practices for Mosquito Control in California

- c. **Type(s) of pesticides used, the method in which they are applied, and if applicable, the adjuvants and surfactants used;**

Please see the Best Management Practices for Mosquito Control in California

- d. **Description of the types and locations of the anticipated application area\* and the target area to be treated by the Discharger, recognizing that, with vector control, the precise locations may not be known until after surveillance;**

Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is the Program's preferred solution, and whenever possible the Program works with property owners to effect long-term solutions to reduce or eliminate the need for continued applications as described in Best Management Practices for Mosquito Control in California. The typical sources treated by this Program include:

- Alpine Wetland Meadows
- Stagnate Settling Ponds
- Underground Vaults and Drainages
- Roadside ditches with standing water
- Golf Course Features
- Snowmelt Pools, sloughs, and Ponds
- Flood irrigated pastureland
- Residential Standing Water Features
- Manmade Drainages
- Old river channel and oxbows
- Ponds and lakes

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DIVISION OF WATER QUALITY

**e. Other control methods used (alternatives) and their limitations;**

With any mosquito or other vector source, the Program's first goal is to look for ways to eliminate the source, or, if that is not possible, for ways to reduce the vector potential. The most commonly used methods and their limitations are included in the Best Management Practices for Mosquito Control in California.

Keeping the public aware of control operations that aren't as audible or visible as adulticiding, as well as current mosquito conditions, source reduction procedures, disease threats, and bite prevention measures are all ongoing through the use of the usual media channels such as local Radio, TV, and Newspaper. The Program also uses other media and events such as the Inyo Mono Agriculture website, social media such as Facebook, the Tri County Fair, community get-togethers, and one-on-one conversations. Field staff are encouraged to engage inquiries with courtesy and look at a one-on-one conversation in the field as an opportunity to share the parts of the IMMP that are not as well known by the public.

**f. Approximately how much product is anticipated to be used and how this amount was determined**

**2010 Pesticide use table**

<b>Pesticide Name (from label)</b>	<b>EPA Registration Number</b>	<b>Amount applied</b>	<b>Units</b>
Pyrenone 25-5	432-1050	63	gal
Zenivex E20	2724-791	5	gal
Agnique MMF	53263-28	40	gal
Altosid SBG	2724-489	62	lbs
Altosid XR-G	2724-451	391	lbs
Fourstar briquetes	83362-3	66	lbs
Vectobac TP	73049-13	528	lbs
GB-1111	8329-72	13	gal
BVA 2 oil	70589-1	13	gal
VectoBac G	73049-10	395	lbs
Vectolex CG	73049-20	1000	lbs
Vectomax CG	73049-429	305	lbs
Altosid 30-day pellets	2724-448	112	lbs

*2010 was a typical year for abatement in the Program which could be used as a measure for anticipated use in future years.*

**g. Representative monitoring locations\* and the justification for selecting these monitoring locations**

Please see the MVCAC NPDES Coalition Monitoring Plan



- h. Evaluation of available BMPs to determine if there are feasible alternatives to the selected pesticide application project that could reduce potential water quality impacts; and**

Please see the Best Management Practices for Mosquito Control in California

- i. Description of the BMPs to be implemented**

Please see the Best Management Practices for Mosquito Control in California

**2. The Discharger shall update the PAP periodically and submit the revised PAP to the State Water Board for approval if there are any changes to the original PAP.**

**D. Best Management Practices (BMPs)**

**The Discharger shall develop BMPs that contain the following elements:**

The Program's BMPs are described in the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan.

**1. Identify the Problem**

**Prior to first pesticide application covered under this General Permit that will result in a discharge of residual pesticides to waters of the US, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the Discharger must do the following for each vector management area:**

- a. Establish densities for larval and adult vector populations to serve as action threshold(s) for implementing pest management strategies**

Only those mosquito sources that Program staff determines to represent imminent threats to public health or quality of life are treated. The presence of any mosquito may necessitate treatment, however higher thresholds may be applied depending on the Program's resources, disease activity, or local needs. Treatment thresholds are based on a combination of one or more of the following criteria:

- Mosquito species present
- Mosquito stage of development
- Pest, nuisance, or disease potential
- Disease activity
- Mosquito abundance
- Flight range
- Proximity to populated areas
- Size of source
- Presence/absence of natural enemies or predators
- Presence of sensitive/endangered species or habitats.

- b. Identify target vector species to develop species-specific pest management strategies based on developmental and behavioral considerations for each species;**

Please see the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan.

- c. Identify known breeding areas for source reduction, larval control program, and habitat management; and**

Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is the Program's preferred solution, and whenever possible the Program works with property owners to implement long-term solutions to reduce or eliminate the need for continued applications as described in Best Management Practices for Mosquito Control in California.

- d. Analyze existing surveillance data to identify new or unidentified sources of vector problems as well as areas that have recurring vector problems.**

This is included in the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan that the Programs uses. The Program continually collects adult and larval mosquito surveillance data, submits adult mosquito samples for encephalitis virus surveillance, monitors dead bird reports, and uses them to guide mosquito control activities.

## **2. Examine the Possibility of Alternatives to Treatments**

**Dischargers should continue to examine the possibility of alternatives to reduce the need for applying larvicides that contain temephos and for spraying adulticides. Such methods include:**

- a. Evaluating management and treatment options that may impact water quality, non-target organisms, vector resistance, feasibility, and cost effectiveness, such as:**

- No action
  - Source prevention
  - Mechanical or physical source reduction methods
  - Cultural methods
  - Biological control agents
  - Pesticides

- b. Applying pesticides only when vectors are present at a level that will constitute a nuisance or threat to public health**

- c. Using the least intrusive method of pesticide application.**

- d. Public education efforts to reduce potential vector breeding habitat.**

- e. Applying a decision matrix concept to the choice of the most appropriate formulation.**

This describes the Program's existing integrated vector management (IVM) program, as well as the practices described in the California Mosquito-borne Virus Surveillance and Response Plan and Best Management Practices for Mosquito Control in California that are used by this agency.

### **3. Correct Use of Pesticides**

Users of pesticides must ensure that all reasonable precautions are taken to minimize the impacts caused by pesticide applications. Reasonable precautions include using the proper spraying techniques and properly calibrated equipment, taking account of weather conditions and the need to protect the environment.

- a. All errors in application and spills are reported to the proper authority.
- b. Staff training in the proper application of pesticides and handling of spills.

This is an existing practice of the Program, and is required to comply with the Department of Pesticide Regulation's (DPR) requirements and the terms of our California Department of Public Health (CDPH) Cooperative Agreement. All pesticide applicators receive annual safety and spill training in addition to their regular continuing education.

### **4. Spill Containment, Training, and Equipment / Calibration**

#### **a. measures to prevent pesticide spill**

Program staff monitors application equipment on a daily basis to ensure it remains in proper working order. Spill mitigation devices are placed in all spray vehicles and pesticide storage areas to respond to spills. Employees are trained on spill prevention and response annually.

#### **b. measures to ensure that only a minimum and consistent amount is used**

Spray equipment is calibrated each year and is a part of the MOU with CDPH

#### **c. a plan to educate Coalition's or Discharger's staff and pesticide applicator on any potential adverse effects from the pesticide application**

Applicators are required to complete pesticide training yearly.

#### **d. descriptions of specific BMPs for each spray mode, e.g. aerial spray, truck spray, hand spray, etc.; cease and desist order**

Program will calibrate truck and hand larviciding equipment each year to meet application specifications. Supervisor reviews spray records daily to ensure appropriate amounts of material are being used. ULV equipment is calibrated for output and droplet size to meet label requirements. Aerial larviciding equipment is calibrated by the Contractor. Aerial adulticide equipment is calibrated regularly and droplet size will be monitored by the Program to ensure droplets meet label requirements.

#### **e. descriptions of specific BMPs for each type of environmental setting (agriculture, urban, and wetlands).**

Please see the Best Management Practices for Mosquito Control in California.

### **E. Pesticide Application Log**

The Discharger shall maintain a log for each pesticide application. The application log shall contain, at a minimum, the following information, when practical, for larvicide or adulticide applications:

1. Date of application;
2. Location of the application and target areas (e.g., addresses, crossroads, or map coordinates);
3. Name of applicator;
4. The names of the water bodies treated if known/ named(i.e., canal, creek, lake, etc.);
5. Application details, such as when the application started and stopped, pesticide application rate and concentration, water flow rate of the target area, surface water area, volume of water treated, pesticide(s) and adjuvants used by the Discharger, and volume or mass of each component discharged;

This is an existing practice of the Program as required to comply with DPR regulations and our CDPH Cooperative Agreement requirements.

#### References:

Best Management Practices for Mosquito Control in California. 2010. Available by download from the California Department of Public Health—Vector-Borne Disease Section at <http://www.cdph.ca.gov/HealthInfo/discond/Pages/MosquitoBorneDiseases.aspx> or <http://www.westnile.ca.gov/resources.php> under the heading Mosquito Control and Repellent Information. Copies may be also requested by calling the California Department of Public Health—Vector-Borne Disease Section at (916) 552-9730 or the Owens Valley Mosquito Abatement Program at (760)873-7860.

California Mosquito-borne Virus Surveillance and Response Plan. 2010. [Note: this document is updated annually by CDPH]. . Available by download from the California Department of Public Health—Vector-Borne Disease Section at <http://www.cdph.ca.gov/HealthInfo/discond/Pages/MosquitoBorneDiseases.aspx> or <http://www.westnile.ca.gov/resources.php> under the heading Response Plans and Guidelines. Copies may be also requested by calling the California Department of Public Health—Vector-Borne Disease Section at (916) 552-9730 or the Owens Valley Mosquito Abatement Program at (760)873-7860.

MVCAC NPDES Coalition Monitoring Plan. 2011. [In development at the time of this draft]